

AMENDMENTS TO CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A method for reducing the transmission requirements of a system for transmitting image data to a display device, the method comprising ~~the steps of:~~

receiving first image data representing a plurality of first pixels defining an image for display on the display device, the first image data being transmitted in a data stream and being in a predetermined order of pixel components;

creating second image data representing a plurality of second image pixels;

and

determining if an attribute of a second image pixel is defined by one of the pixel components, wherein the second image data is created by transforming the first image data as it is received by selectively storing some of the pixel components in a memory for access by the display device, a pixel component being selected if a second image pixel is at least partially defined by the pixel component, and discarding other of the pixel components.

2. (currently amended) The method of claim 1, wherein ~~said step of~~ receiving the first image data includes receiving a first pixel component corresponding to a line of the display at a first time, ~~wherein said step of~~ selectively storing ~~the image data~~ includes storing the ~~said~~ first pixel component at a second time subsequent to the ~~said~~ first time, and ~~wherein said step of~~ receiving further includes receiving a second pixel component corresponding to the ~~same said~~ line at a third time subsequent to the ~~said~~ second time.

3. (cancelled)

4. (cancelled)

5. (currently amended) The method of claim 2 ~~1~~, wherein ~~said step of~~ receiving the first image data includes receiving the ~~said~~ first and second pixel components consecutively.

6. (cancelled)
7. (currently amended) The method of claim ~~9~~ 1, wherein ~~the said~~ data stream ~~comprises~~ is 4:2:2 block-interleaved data
8. (cancelled)
9. (currently amended) The method of claim 1, wherein ~~the said~~ data stream comprises JPEG decoded block-interleaved data.
10. (currently amended) The method of claim 1, wherein ~~said step of~~ transforming the first image data as it is received includes cropping the image.
11. (currently amended) The method of claim 1, wherein ~~said step of~~ transforming the first image data as it is received includes scaling the image.
12. (currently amended) An apparatus for reducing the ~~transmission requirements of a system for transmitting image data to a display device, the image data representing a plurality of pixels defining an image for display on the display device, the image data being transmitted in a data stream and being in a predetermined order of pixel components, comprising:~~
 - a receiving module ~~adapted to receive the image data from the data stream and to compute a coordinate location in the image for each pixel component in the data stream; and~~
 - a transforming module ~~adapted to transform the image data as it is received by selectively storing some pixel components of the data stream of the image data in a memory for access by the display device and discarding other pixel components of the data stream of the image data.~~
13. (currently amended) The apparatus of claim 12, wherein ~~the said~~ receiving module ~~is adapted to~~ receives a first pixel component data element corresponding to a line of the display image at a first time, ~~the wherein said~~ transforming module ~~is adapted to~~ selectively stores the said first pixel component data element at a second time subsequent to the said first time, and ~~the wherein said~~ receiving module ~~is further adapted to~~ receives a second pixel component data element corresponding to the ~~same said~~ line at a third time subsequent to the said second time.

14. (currently amended) The apparatus of claim 12 ~~13~~, the receiving module additionally to compute a component type for each pixel component in the data stream, wherein the memory is allocated into two or more portions, and the transforming module selectively stores pixel components of a first type in a first portion of the memory and pixel components of a second type in a second portion of the memory, ~~wherein said data element is a pixel.~~

15. (cancelled)

16. (cancelled)

17. (currently amended) The apparatus of claim 12 ~~16~~, wherein if a pixel of the transformed image data is at least partially defined by a pixel component, the pixel component is selected by the transforming module for storing, ~~wherein said data element is a pixel.~~

18. (currently amended) The apparatus of claim 17 ~~16~~, wherein a pixel of the transformed image data is at least partially defined by a pixel component if the coordinate location in the image for the pixel component corresponds with a coordinate location for the pixel of the transformed image data, ~~wherein said data element is a pixel component.~~

19. (currently amended) The apparatus of claim 12, further comprising an arranging module to fetch selected pixel components from the memory and to arrange the selected pixel components into a pixel of the transformed image data, ~~wherein said receiving module is adapted to receive the image data from a CODEC.~~

20. (currently amended) The apparatus of claim 12, wherein the said data stream comprises JPEG decoded block-interleaved data.

21. (currently amended) The apparatus of claim 12, wherein the said transforming module is adapted to crop the image.

22. (currently amended) The apparatus of claim 12, wherein the said transforming module is adapted to scale the image.

23. (currently amended) The apparatus of claim 12, wherein ~~the said~~ apparatus is embodied in a graphics controller.

24. (currently amended) A machine-readable medium embodying a program of instructions for execution by a machine to perform a method for reducing the transmission requirements of a system for transmitting image data ~~to a display device~~, the image data representing a plurality of pixels defining an image ~~for display on the display device~~, the image data being transmitted in a data stream and being in a predetermined order of pixel components, the method comprising ~~the steps of:~~

receiving ~~the~~ first image data from the data stream, the first image data representing a plurality of first pixels defining the image;

creating second image data representing a plurality of second image pixels;

and

determining if an attribute of a second image pixel is defined by one of the pixel components, wherein the second image data is created by transforming the first image data as it is received by selectively storing some of the pixel components in a memory ~~for access by the display device~~ and discarding other of the pixel components, a pixel component being discarded if all of the second image pixels can be defined without the pixel component.

25. (currently amended) The machine-readable medium of claim 24, further comprising fetching selected pixel components from the memory and arranging the selected pixel components into second image pixels, wherein said step of receiving the image data includes receiving a first pixel component corresponding to a line of the display at a first time, wherein said step of selectively storing the image data includes storing said first pixel component at a second time subsequent to said first time, and wherein said step of receiving further includes receiving a second pixel component corresponding to the same said line at a third time subsequent to said second time.

26. (cancelled)

27. (cancelled)

28. (cancelled)

29. (cancelled)

30. (cancelled)

31. (currently amended) The machine-readable medium of claim 24, wherein if a second image pixel is at least partially defined by a pixel component, the pixel component is selected for storing. ~~said step of receiving the image data receives the image data from a CODEC.~~

32. (currently amended) The machine-readable medium of claim 24, wherein the ~~said~~ data stream comprises JPEG decoded block-interleaved data.

33. (currently amended) The machine-readable medium of claim 24, wherein ~~said~~ ~~step of~~ transforming the image data as it is received includes cropping the image.

34. (currently amended) The machine-readable medium of claim 24, wherein ~~said~~ ~~step of~~ transforming the image data as it is received includes scaling the image.

35. (new) The method of claim 1, further comprising determining a coordinate location in the image for each pixel component from the respective positions of each of the pixel components in the predetermined order, wherein a second image pixel is determined to be at least partially defined by a pixel component if the coordinate location in the image for the pixel component corresponds with a coordinate location for the second image pixel.